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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,953	03/23/1999	ITZIK BEN-BASSAT	3055.00068	9162

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EXAMINER

HUYNH, SON P

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/274,953

Applicant(s)

BEN-BASSAT ET AL.

Examiner

Son P. Huynh

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7-9 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7-9 and 24-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/07/05 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 2-4, 7-9, 24-29 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues Naiff does not teach VSATs; the examiner relies on Bukhari (US 6,763,222) for the teaching of using VSAT.

Therefore, rejections on claims 2-4,7-9,24-29 are analyzed as discussed below.

Claims 1, 5-6, 10-23 have been canceled.

Claim Rejections - 35 USC § 103

Art Unit: 2611

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24, 2-4, 7, 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naiff (US 5,982,363) in view of Bukhari (US 6,763,222).

Regarding claim 24, Naiff teaches a card (40 –figure 3) for communicating to and from a personal computer (20-figure 4) to external network, comprising:

a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus (PCI) in the personal computer (see figure 3);

radio frequency modulator circuitry on the circuit board, which receives the data and transmits radio frequency signals responsive thereto (television interface (card 40) includes means for modulating the television signals on a carrier for output to the television appliance on a standard television channel frequency – col. 2, line 66-col. 3, line 5; the card 40 receives data from television service provider, processes and transmits the television signal to television via transceiver on the card and simple antenna. The card further receives data from user and transmits the data to the television service provider via coaxial cable 16 (col. 6, lines 29-32; which connected to a satellite receiver (figures 3-4; col. 5, line 10 – col. 6, line 37); and the card is connected to a satellite receiver using cable (16) – figure 4. Inherently, the satellite receiver

Art Unit: 2611

includes a transmitter for transmitting data from the card to an earth orbiting satellite.

However, Naiff does not specifically disclose a connector, which a DC source external to the card powers the satellite receiver, wherein the satellite is a very small aperture terminal (VSAT) comprising an upconverter and a power amplifier for transmitting data to an earth-orbiting satellite.

Bukhari discloses a connector, which a DC source from IDU (24) powers the VSAT out door unit (ODU – col. 1, lines 6-22; col. 2, lines 14-35; col. 3, lines 42-48), wherein the VSAT comprising an upconverter (frequency multiplier circuit 34) and a power amplifier (36) for transmitting data to an earth orbiting satellite (figure 2, col. 3, line 50-col. 4, line 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naiff's system to use the teaching as taught by Bukhari in order to reduce power consumption; and furthermore, to reduce the cost of the system.

Regarding claim 2, Naiff in view of Bukhari teaches a method as discussed in the rejection of claim 24. Naiff further discloses the peripheral card comprises components such as a tuner with associated television signal processing circuit which tunes to requested channel based on the signal input from the remote control, the selected channel is accessed by access control circuitry; audio/video decompression circuitry; video and audio multiplexers; upconverter for outputting RF signal to user's television (see col. 5, lines 49-60). In addition, Naiff discloses the telephone return port 64 of peripheral card 40 communicates to service provider using RF return path (see col. 8,

Art Unit: 2611

lines 6-13) and peripheral card 40 communicates to the television using RF signal transmission (see col. 9, lines 19-42). It is obvious that the radio frequency modulation circuit comprises frequency synthesizer generating the radio frequency signals for transmitting between devices and external networks to improve efficiency in data transmission.

Regarding claim 3, Naiff further discloses application software in the PC controls various functions of the television interface card 40 via bus control 86; the application software also used to tune o channels requested by a user via the remote control 26 (see col. 6, lines 57-63 and figure 3). Necessarily, the frequency generated by the frequency synthesizer is set by a controller on the circuit board.

Regarding claim 4, Naiff further discloses the application software control various functions of the television interface card 40 via bus controller 86 (see col. 6, lines 57-63 and figure 3). Necessarily, the frequency generated by the frequency synthesizer is set by conveying instructions via the computer bus.

Regarding claim 7, Naiff in view of Bukhari teaches a card as discussed in the rejection of claim 24. Naiff further discloses the application software in the PC controls the various functions of the television interface card 40, including generation of electronic program displays from data provided by the television system operator. It would have

Art Unit: 2611

been obvious to one of ordinary skill in the art to modulate the transmitted signals according to a predetermined protocol in order to improve efficiency in data processing.

Regarding claim 26, Naiff teaches a card (40 –figure 3) for communicating to and from a personal computer (20-figure 4) to external network, comprising:

a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus (PCI) in the personal computer (see figure 3);

radio frequency modulator circuitry on the circuit board, which receives the data and transmits radio frequency signals responsive thereto (television interface (card 40) includes means for modulating the television signals on a carrier for output to the television appliance on a standard television channel frequency – col. 2, line 66-col. 3, line 5; the card 40 receives data from television service provider, processes and transmits the television signal to television via transceiver on the card and simple antenna. The card further receives data from user and transmits the data to the television service provider via coaxial cable 16 (col. 6, lines 29-32; which connected to a satellite receiver (figures 3-4; col. 5, line 10 – col. 6, line 37); and the card is connected to a satellite receiver using cable (16) – figure 4. Inherently, the satellite receiver comprises a transmitter transmits data from the card to an earth orbiting satellite. However, Naiff does not specifically disclose the satellite is a very small aperture terminal (VSAT) comprising an upconverter and a power amplifier for transmitting data to an earth-orbiting satellite.

Art Unit: 2611

Bukhari discloses a VSAT comprising an upconverter (frequency multiplier circuit 34) and a power amplifier (36) for transmitting data to an earth orbiting satellite (figure 2, col. 3, line 50-col. 4, line 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naiff's system to use the teaching as taught by Bukhari in order to reduce power consumption; and furthermore, to reduce the cost of the satellite transceiver.

Regarding claims 27-29, the additional limitations as claimed correspond to the additional limitations as claimed in claims 2-4, respectively, and are analyzed as discussed with respect to the rejections of claims 2-4.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naiff (US 5,982,363) and Bukhari (US 6,763,222) as applied to claim 24 above, and in view of Bock et al. (US 5,953,418).

Regarding claim 8, Naiff in view of Bukhari teaches a card as discussed in the rejection of claim 24. However, neither Naiff nor Bukhari specifically discloses the modulation circuitry comprises an encoder, which encodes error correction into the transmitted signals according to a predetermined protocol in accordance with a command conveyed to the card via the industry standard bus.

Art Unit: 2611

Bock et al. discloses signal processor 68 in transmitter card 62 comprises encoder (error correction 92) that encodes error correction into the transmitted signals (see figure 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naiff and Bukhari to use the teaching as taught by Block in order to allow the receiver to correct transmission errors.

6. Claims 9 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naiff (US 5,982,363) and Bukhari (US 6,763,222), and further in view of Goldman et al. (US 5,592,366).

Regarding claim 9, Naiff in view of Bukhari teaches a card as discussed in the rejection of claim 24. However, neither Naiff nor Bukhari specifically discloses the card is coupled to at least one other card located in the computer such that signals pass between the cards without passing through the industry standard bus.

Goldman et al. discloses the card comprises an auxiliary connector through which the card is coupled to at least one other card located in the computer such that signals pass between the cards without passing through the industry standard bus (see col. 4, lines 51-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naiff and Bukhari to use the teaching as taught by Goldman et al. in order to update the system easily, and furthermore, to allow the card communicates directly to the other cards thereby increase efficiency of the system.

Regarding claim 25, Naiff discloses a television interface peripheral card for communicating to and from a personal computer through a satellite (figures 3-4). The card receives data from external network via satellite receiver, processes the data and provides to the television device. The card further receives data from television device, processes data, and provides and data via cable 16 to satellite receiver for providing to the television service provider (figures 3-4, col. 5, lines 30-65; col. 6, lines 30-67). Naiff further discloses the card is plugged into a computer to exchange data via an industrial bus (via PCI interface 94-figure 3). Necessarily, the device comprises a transmitter card and receiver card which plug into computer to exchange data between satellite receiver and personal computer. Naiff further discloses the satellite receiver transmits RF signals from the card received via cable 16 (figure 4, col. 6, lines 29-35). However, Naiff does not specifically discloses the satellite receiver is a VSAT comprises an upconverter and a power amplifier; an auxiliary bus connecting between the cards.

Bukhari discloses a VSAT comprising an upconverter (frequency multiplier circuit 34) and a power amplifier (36) for transmitting data to an earth orbiting satellite (figure 2, col. 3, line 50-col. 4, line 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naiff's system to use the teaching as taught by Bukhari in order to reduce power consumption; and furthermore, to reduce the cost of the satellite transceiver. However, neither Naiff nor Bukhari specifically disclose an auxiliary bus connecting between the cards.

Goldman et al. discloses transmitter card coupled to a receiver card by a pair of shielded cable (see col. 4, lines 51-57) reads on the claimed feature of "an auxiliary bus connecting the transmitter card and the receiver card". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naiff and Bukhari to use the teaching as taught by Goldman et al. in order to update the system easily, and furthermore, to allow the card communicates directly to the other cards thereby increase efficiency of the system.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carhart (US 6,622,304) discloses interface system for computing apparatus and communications stations.

Toporek et al. (US 6,584,083) discloses Internet over Satellite method.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 8:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 571-272-7294. The fax phone

Art Unit: 2611

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPH
June 20, 2005



CHRIS GRANT
PRIMARY EXAMINER